MAGAZINE Vist Vatcn^m

THE PAST, PRESENT AND FUTURE OF FINE TIMEPIECES

A.LANGE & SÖHNE

WATCHMAKING IN **GLASHÜTTE**

PATEK HILIPPE

NYC EXHIBITION **PREVIEW**

CZAPEK & CIE.

RE-BIRTH OF A ROYAL BRAND



»cover story:
Ruclis As Sylva

The Harmonious Oscillator: The

Tourbillon Reference





























TECH BUMP

Covering the world of watches since 1990, first as the founder and Editorial Director/Publisher for *International Wristwatch Magazine*, now known as *iW*, and now as Editor of *WristWatch*, I have been fortunate to be a willing witness to the reincarnation of the spring-driven timepiece right from the early stages of renewal nearly three decades ago. The fact that there was a return at all speaks volumes about the consumers at the base of this renewal and underlines the faith required in these consumers as the industry extracted itself from a death spiral in a quartz-regulated world.

Today's buyers are no longer motivated to own a device simply to accurately indicate the time, yet they do continue to buy fine watches at all price points.

In terms of the current consumerism, timekeeping is just an excuse that justifies buying what for some is art, others accoutrement, and for the most indoctrinated of consumers, a work of engineering art with its own heartbeat. This is why the electronic watch, no matter how 'smart' it might be, cannot capture the same motivating values that drive the purists. That said, quartz watches have secured a strong following and have even broken through to

luxury status in their best iterations. The numbers don't lie: Apple & others are selling millions of units with various data tracking and connectivity options.

I've discussed the rapid growth of the non-secular watch with a variety of industry mavens. Some decry the type as the next quartz onslaught that will definitely hurt traditional types and claim market share, while others point out that these new wearers are potentially new customers, which means many of these sales are not poaching from the base. The reality is that there's probably a bit of both in play, and if an increasing percentage of new customers find their way to the world of mechanical watches via tech — I'm all for it.

Whether on your desk, in your hand, or on your wrist, technology is disposable. Luxury lasts.

Keep Watching,

Gary George Girdvainis gary@isochronmedia.com

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POSITIVE SIGNS?

As we start a new year that I can only hope will offer watch collectors more to cheer for than the generally downbeat 2016, I've already seen a few positive signs of what's ahead in 2017.

The first inkling of good news came just a few months ago as Patek Philippe announced plans for a large-scale historic time-piece exhibition in New York. Watch fans who attended the Geneva watchmaker's exhibition at London's Saatchi Gallery two years ago know that when this company wants to woo the public it mobilizes resources available to very few others.

The upcoming exhibit, called "The Art of Watches, Grand Exhibition New York 2017," is scheduled to open July 13 at Cipriani on 42nd Street just across the street from Grand Central Terminal. It will consist of ten themed rooms chock full of vintage pocket watches and wristwatches as well as several Patek Philippe models rarely, if ever, seen outside of museums or private collections.

As Patek Philippe vows to use the space to inform the public about centuries of watchmaking history, visitors can expect to see, and learn about, much more than Patek Philippe's own history. In addition, the company will position watchmakers and artisans throughout the space to demonstrate the many skills needed to create today's haute horology.

We hope to see you there during the ten-day exhibit (which is open to the public at no charge starting at 10 am daily.) In the meantime, I invite you to turn to page 78 to take a look at just a few of the drool-worthy timepieces Patek Philippe plans to display during the exhibit.

More glass-half-full evidence can be read between the lines of

our special long-read story "Re-Birth of a Royal Timekeeper" by German-based writer Marton Radkai (starting on page 50) where we learn details about a new high-end watch brand that, despite many odds stacked against it, has made a splash in today's challenging high-horology environment.

Radkai's chronicle of the events leading up to the debut of the brand, Czapek & Cie, paints a picture of enthusiastic founders with an insistence at top-notch materials and design that appropriately echo the work of its namesake watchmaker to French royalty. The strong response to these debut designs from a generally skeptical watch-buying public gives me hope that even in tough times an interesting watch design that is well executed can still gain traction among collectors.

And, as you may know, Czapek & Cie did more than simply get itself noticed by the watch press. Just a few months ago, the brand took home the coveted Public Prize at the 2016 Grand Prix d'Horlogerie de Geneve. We congratulate them and look forward to detailing many more Czapek & Cie debuts in the years ahead.

Regards,

M Thompson

Michael Thompson Editor-in-Chief mike@isochronmedia.com

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PUBLISHING

Isochron Media LLC

Group Publisher Gary George Girdvainis

EDITORIAL

Editorial Director

Worldwide Industry experts: Swiss correspondents

Gary George Girdvainis

Marton Radkai Nitin Shankar

Editor-in-Chief Michael Thompson

Dutch correspondent

Editors/Correspondents North American Editor Ted Diehl

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North American Contributors

Luxury Features Editor Charles Moyer

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Departments Editor Megan LiVolsi

Nicholas Romanov Lundin

Jon Messer

Watch Culture Editor

Steve Lundin

Nancy Olson

ART

Creative Direction Brain Bleach Media Art Director Silvio Del Monaco

info@brainbleachmedia.com www.brainbleachmedia.com

Original Photography Cargill Photography www.cargillphoto.com (203) 258-0099

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ADVERTISING INQUIRIES

Jon Messer, Director of Marketing Phone (516) 659-7500 e-mail: jm@isochronmedia.com Subscriptions: info@isochronmedia.com 25 Gay bower Rd. Monroe, CT 06468

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The Pioneers' Watch







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Pushing the boundaries of skeletonization to the limit, the Excalibur Spider Americas Edition expresses the Manufacture's technical expertise by taking away almost all extraneous metal and leaving just enough structure to support the movement on a web-work of contemporary lines and angles. Inside the 45mm titanium case a manual wind (flying) tourbillon escapement beats at 28,800 bph, is adjusted in six positions, and will run for an extended reserve of up to sixty hours when fully wound. This exclusive monochrome edition (with touches of red and yellow on the chapter rings) is only available at the Roger Dubuis Fifth Avenue boutique in New York and is delivered on a white rubber strap. \$167,500 is the entry fee to be one of only twenty collectors on the planet to own one of these Swiss Made American beauties.

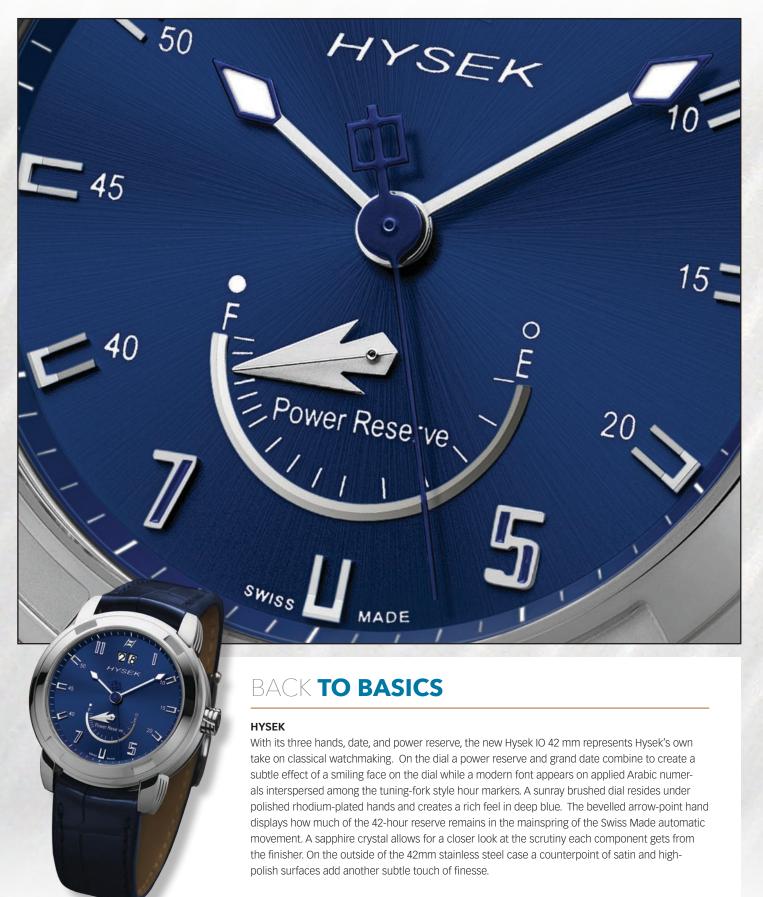


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ONE MAN'S **TREASURE**

LOUIS MOINET

Louis Moinet's concept series "Treasures of the World" presents various unusual materials as the art to complement the engineering legitimacy of the firm's Vertalis Tourbillon. Working in partnership with Daniel Haas, a specialist in the world of semi-precious stones, Jean-Marie Schaller has explored the world of color & texture in singular examples of his fantastic timepieces. Bringing back stones from around the world, Haas uses artisanal techniques passed along from his father to individually craft wafers of material to exacting proportions that can be no thicker than 0.6 mm to fit in the limited vertical space available on the dial. Each example of the Treasures Of The World is in-fact unique and only one example of each is made. If individuality runs deep in your connoisseur heart, prepare to invest \$250,000 for any one of the 23 individual creations – if you can find one.







BORN AGAIN

TORSTI LAINE

Laine's Chronograph combines a modern look and clean façade with a fifty-year-old movement that started life as a Valjoux 72, but has become much more in the hands of Laine's craftsman. Fully refurbished and upgraded with no less than thirty-eight new components, the manual-wind chronograph from yesteryear takes on a new visage with substantial upgrades in appearance and performance. The process includes the thorough restoration of original movements and in-house creation of new parts, including five bridges, four springs, a new coupling clutch assembly and a pristine balance wheel made of copper beryllium with four adjustable, white-gold inertia weights. Each Laine Chronograph also features a free-sprung balance spring with a hand-bent Phillips terminal curve. All steel components, bridges, and watch hands are filed and polished by hand.

Both the movements and dials are available in several color options, and the 40mm watch cases are available in stainless steel or rose gold. A limited number of these chronographs are reborn each year. Prices in steel are approximately \$29,000; \$36,000 in rose gold. More details can be found at www.torstilaine.com









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COLORFUL CAPILLARIES

HYT

When HYT launched its unusual hydraulic display of timekeeping in 2012 it was unlike anything in watchmaking. Pistons push a visible liquid through a pipette to indicate the hour in a new take on timekeeping. Hydraulics is certainly nothing new, but adapting it to the miniature format and mechanically motivating the fluids was no mean feat. Collectors of substantial means have confirmed the value of the design and in a relatively short period HYT has established itself as an outsider option for the wealthy collector and continues to evolve fluidic wristwatches in new directions. The recent addition of bold colors is another example of how HYT can interpret this unique approach. Only ten of each edition in red, blue or yellow will be made.





WALDAN REF. 3986S-2

Waldan's ultimate everyday wristwatch for the discerning collector. The ref. 3986R-1 features a 42mm 18K pink gold case with a sapphire crystal, see through exhibition back and cabochon sapphire set into the crown (limited to 20/50 pieces). The dial is white enamel with applied pink gold arabic markers, pink gold hands and blue steel sweep hand and forked date indicator hand. Complications are full calendar, GMT, moonphase and chronograph. Movement is a NOS Valjoux 7751 automatic winding movement (25 jewels, 28,800 vph/4Hz, 42H power reserve). Limited production of 50 pieces. Available at authorized retailer:



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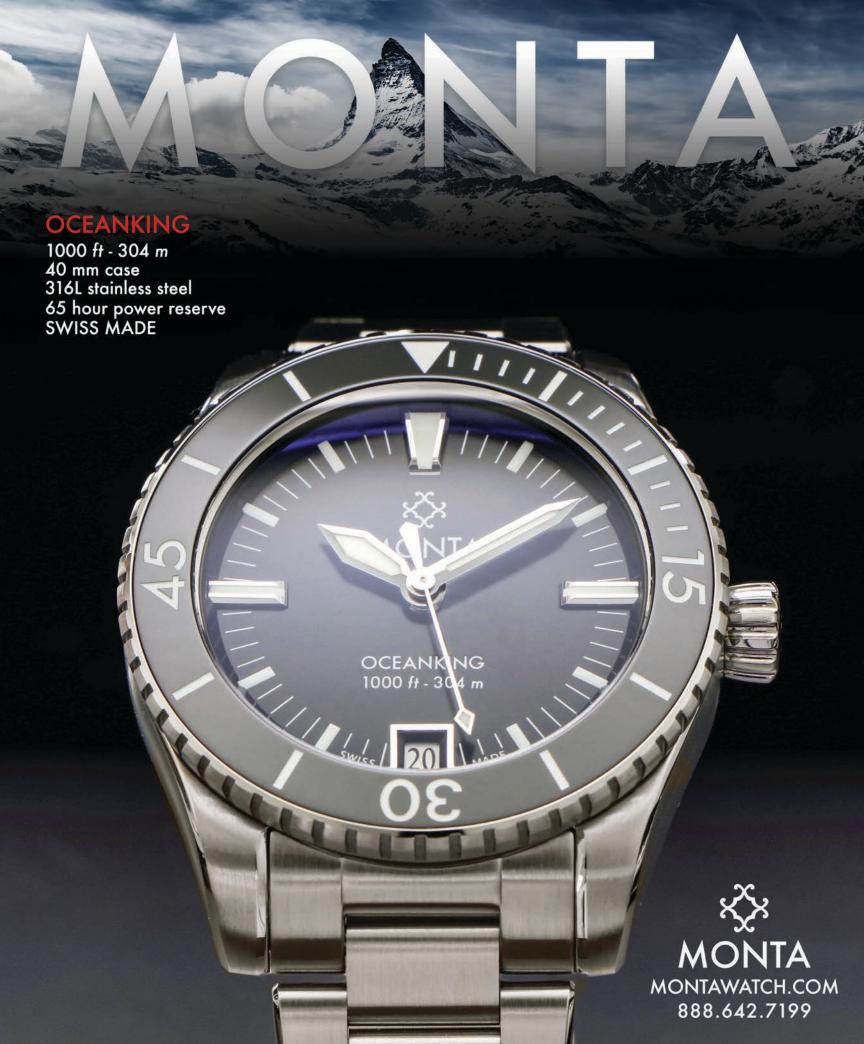
UNUSUAL **MARRIAGE**

URWERK

It may seem strange to add electronic components to a watch that has pushed mechanical ingenuity as far as Felix Baumgartner and Martin Frei have with the watches they make at Urwerk. That said, the idea that these two disparate constructions cannot be combined in a manner that entices high-end collectors is laid to rest with the EMC Timehunter X Ray. While all timekeeping functions are performed using the timeless principles of mechanical watchmaking, Urwerk has integrated an electronic system that can show how accurately the EMC is running. A few rapid turns on the attached handle generates enough energy for the electronic module to do a quick analysis of how fast or slow your watch may be running. Even more incredibly, it will also investigate the actual amplitude of the oscillating balance wheel. Once the rate is determined you can make minor timing adjustments on the spot. Limited to only fifteen pieces, this new addition to the Urwerk family will retail for \$135,000.









CELEBRATING A DECADE

F.P. JOURNE

F.P. Journe has begun marking the tenth anniversary of each of its worldwide boutiques with a limited edition exclusive to each venue. The F.P. Journe Centigraphe pushed mechanical capabilities to the limit with a short-term chronograph that can time events up to ten minutes, down to 1/100th of a second. This patented device cleverly isolates the chronograph function from the timekeeping function and is another perfect expression of the brand's motto: Invenit et Fecit (Invented and Made). This edition of twenty will retail for 59,800 Swiss francs exclusively at the F.P. Journe Hong Kong boutique.







ProMare Chronograph

Anyone who thinks of a newsreader when they hear the word anchor, milking cows when confronted with rudders and colourful friendship bracelets when asked about knots should probably stop reading right now. Everyone else should definitely dare to take a closer look at and be impressed by our new ProMare watch. This robust sports watch suits a wide range of outdoor and water activities down to a T, from sailing through to kite buggying and right through to waterskiing. This active nautical focus also formed the inspiration for the name of the new Mühle watch, which was created from "pro" and "mare", a combination of Latin terms meaning "for the sea". www.muehle-glashuette.de

For more information please contact:

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Martin Pulli Fine Jewelry and Watches Phliadelphia, PA | Trident Jewels and Time St. Thomas USVI | Ray's Jewelry Philipsburg, St. Maarten





FLYING TWINS

MANUFACTURE ROYAL

The Manufacture Royal 1770 Micromegas Revolution is an amazing timepiece both technically and visually. Two flying tourbillons are connected by a torque stabilizer while they rotate at two different speeds, one at six seconds and the other at sixty seconds. An hour hand tracks a subdial while a skeletonized turning disc indicates minutes. These visible components are joined on the dial by an oscillating rotor that can be viewed performing its role of powering a truly unique timekeeping mechanism. Available in either titanium at \$150,700, or rose gold for \$178,200, only a handful of these technical wonders will be made.

Montegrappa





MY BROTHER'S (TIME) KEEPER

GRÖNEFELD

Tim & Bart Grönefeld may not be household names, but like a few other exceptional examples of horological savoir faire, the Grönefeld Remontiore will impress anyone who takes the time to look closely. The simple façade only hints at what lies beneath by way of the remontoire regulator at nine o' clock. This regulator stabilizes the power to the escapement while the remontoire that feeds the assembly is re-energized every eight seconds. When curiosity demands you look more closely, the view of the movement from the reverse side is nothing less than a mechanical masterpiece that will keep your eye in the loupe until you've imbibed every square millimeter of the stunning masterpiece. Only 188 of these will be made over the coming years, and at about \$50,000 it might actually be one of the best values in high watchmaking.







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GENERATIONS

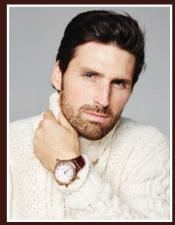
WALDAN

Based in New York, Waldan has always offered watches that lived up to what Swiss Made was intended to represent. Using the highest grade Swiss calibers available of a given type, the engine within a Waldan stands the test of time, as well as the scrutiny of the loupe. No, they are not using some exotic and purportedly in-house Calibre XYZ, rather, from father to son the tradition of crafting small qualtities of timeless timepieces continues on. Now run by the second generation of Waldans, the basic cues that made a Waldan watch the epitome of a traditional watch have evolved into the modern era without losing their identity. The titanium DLC edition shown here has grown a bit larger into a 42 mm frame, and has eschewed precious metal for a darker, sportier look, but the stepped bezel, lugs, and subtle cues from the first generation remain. Inside is a COSC Chronometer- rated Valjoux 7751 enhanced with a custom 18-karat gold rotor. Prices are \$12,500.00 each and you can see them in person at Waldan's new Manhattan boutique. More details at www.waldanwatches.com





Chris Aire is an iconic internationally acclaimed brand, sought after by the most discerning watch collectors around the world. Each design showcases true luxury, combining impeccable design, high luxury Swiss movements and technology. Designed exclusively by Chris Aire in Beverly Hills California and made by the most prestigious watch houses in Switzerland. The Chris Aire Parlay Ambidextrous model is produced in limited edition. It encases a Soprod base movement with customized modification split crown and pushers that is ideal for both right and left-handed users. Each watch is offered exclusively in the Chris Aire signature Red Gold collection. From \$54.500.00





Two In TUR BY MICHAEL THOMPSON





Rudis Sylva's unconventional Harmonious Oscillator meshes balance teeth to counteract gravity's pull.

ou don't need a loupe to see that the Rudis Sylva RS 16 is not powered by a conventional movement. At first glance the device with two balances may appear to be a double tourbillon. A more horologically fluent observer might dub it a carrousel, assuming that the entire escapement rotates.

Both guesses, however, would be incorrect.

Rudis Sylva, the atelier-sized independent watchmaking company celebrating its tenth year in 2016, has created its own movement for the RS 16 that, while sharing a few aspects with a tourbillon or carrousel, is neither.

Called the Harmonious Oscillator, the caliber operates with

dual balances mounted on a rotating cage that completes a full revolution in 60 seconds, like many tourbillons.

But where the real ingenuity lies is in the interplay of the twin balance wheels themselves. While only one receives the impulses from the sole escape wheel, the other acts almost as counterweight to average out the timing performance that otherwise might be affected by the pull of gravity and friction. While one balance/hair spring is wound taught during the oscillating cycle, the other is fully expanding. This dance creates an instant and ongoing average timing of the pair.

And look more closely: those balance wheels—not just the hairsprings-are physically connected. Equally odd are the





Right: The Rudis Sylva RS 14

Left: The seconds indicator bridge on the RS 16 is made from titanium and is hand-beveled.

Below: Rudis Sylva Watchmaker Mika Rassinen, who developed the Harmonious Oscillator from an idea by Roman Gillet.





outward-facing teeth around the perimeter of each balance.

Rudis Sylva's watchmaker, the Finnish-born Mika Rissanen, created the Harmonious Oscillator from a concept conceived by local watchmaker Romain Gillet. Rissanen has made this seemingly impossible engineering feat a reality by truncating the already unusual tooth design on the perimeter of each balance. Each meshes with the other without binding or interfering with the free swing(s) of the dual balance system. The symmetry and energy of the balance springs are in permanent opposition, enabling instantaneous average correction in the vertical position. The link ensures the same amplitude.

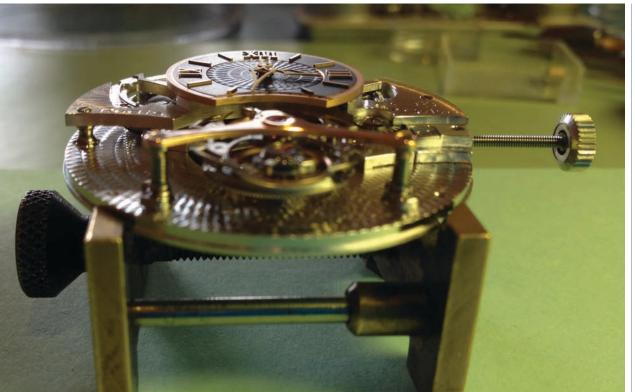
In the same position, the typical stable tourbillon will correct differences due to gravity in about a minute or so. The Harmonious Oscillator, according to figures from Rudis Sylva (see illustration on pg. 46), seems to offer better accuracy than conventional tourbillons or carrousels.

ONGOING INNOVATION

While now presented within RS 16, which debuted this past summer, The Harmonious Oscillator was first seen at Baselworld 2009 in the Rudis Sylva RS 05. The brand at that time was just a few years old. Its founder is former Zenith and Rodolphe executive Jacky Epitaux who started the watch brand to honor the mountainous Franches Montagnes region east of La Chaux-de-Fonds known primarily for its watch component businesses. Hence, he named his new brand Rudis Sylva, which is actually of an old name given to the nearby town of Les Bois by a historic figure in the region Jean Ruedin, who named the area after himself (Rudis) and the Latin word for forest (Sylva), which dominated the region at the time.

Today all the company's components are produced in or near the company's atelier in Saignelégier or from the nearby watchmaking mecca of Le Locle. "Rudis Sylva has remained true







Top: Watch components have long been made in the Franche-Montagnes region, home of Rudis Sylva.

Above: An image of this sundial, originally found on a farmhouse in Le Bois, is now engraved on the back of Rudis Sylva watches.

Left: Preparing a movement for RS 14.

C COVER STORY









Above, from left: RS 14 Rouge, enameller Sophie Cattin and RS 14.

to their land and village, to the artisanal way of life," explains Alexis Sarkissian, whose company Totally Worth It distributes the brand in North America.

"Their bond with the region and the local craftsmen and women is evident in everything they do, from the name Rudis Sylva to the partnership with the engravers, enameller, guilloché artiste, angleur, and watchmaker. All are situated at a stone thrown from Rudis Sylva's own very traditional offices in Les Bois."

That bond with local craftsmen and craftswomen seems quite evident when one admires the workmanship of Rudis Sylva timepieces. Epitaux has made sure that the brand's aesthetics match the high level of technical watchmaking seen in the Harmonious Oscillator.

As a result, the movement itself boasts polished and beveled angles on steel and titanium components above the main plate, where firm's guilloché craftsman, Georges Brodbeck, manually carves designs using a series of rotational (rose engine) and straight line (linear engraver) machining. Another result is an interesting tapered pyramid pattern exclusive to Rudis Sylva.

This hand beveling can be seen best as one examines the work done on both the inward and outward corners of the bridges, which Rudis Sylva explains (correctly) that no machine can reproduce with such superior results. The very visible cage bridge of the oscillator, made from titanium, is not only complicated to make, it's equally difficult to polish thoroughly. Yet here fully twenty-eight closed angles can be seen and admired. But every surface – whether visible or not— is decorated to high levels.

Local artist Sophie Cattin contributes enamelwork to Rudis Sylva. She grew up on the Les Rosées-Dessous farm that houses a sundial that dates to 1750. She now creates an enameled image of that sundial on the back of every Rudis Sylva watch. For each engraving, she crushes silica stones by hand, mixes them in water and applies the resulting paint to the already hand-engraved surfaces of the caseback. After baking in a kiln at 840° Celsius, the enamel is cooled and then polished to obtain a perfect image





"It's a bit like alchemy, " Cattin explains. "And this technique often gives rise to pleasant surprises."

ROUND AND SQUARE

Rudis Sylva surprised many ten years ago with the debut version of the Harmonious Oscillator, placed inside that square-cased RS 05. Since then, the company has placed the movement into a 44mm gold-cased RS 10, RS 12, RS 14 and, finally, this year's RS 16. There's also a ten-piece limited-edition pocket watch, which debuted earlier this year to help celebrate the firm's tenth anniversary.

The RS 16 is a stylistic update of the RS 14, explains Sarkissian, who notes that the new model's case is a bit more streamlined and polished than the earlier model. The new RS 16 also features "a multitude of very complicated angles and finishes," that could easily attract a different type of collector, in part due to its so-called 'glass-box' architecture created by acclaimed watch designer Eric Giroud. Giroud essentially removed the gold bezel seen on RS 14 and replaced it with a vintage-inspired bombé crystal that rises above the movement to frame it in glass.

That broad sapphire display case underscores Rudis Sylva's unusual method of tackling the deleterious effects of gravity on timing within a wristwatch movement. The small company's outsized effort, grandly dubbed the Harmonious Oscillator, has in the eight years since its debut attracted much attention among watchmakers. Its placement within the RS 16 is yet another reason for collectors to pay close attention to this company from the Swiss forests. •



The Watchmaking History of the Franche-Comté

The Rudis Sylva brand was founded in 2006 as an ode to the Franche-Comté region's horological skills, and even today all the brand's components are produced between Saignelégier and Le Locle. The entire Swiss region, also known as La Franche-Montagne, has long been home to watchmakers and makers of watch components.

In 1852, Emile Huot, originally from Franche-Comté, set up in Les Bois where he founded a timepiece assortment, lever and cylinder factory. In 1916, the business resisted the overtures of the various Swiss assortments trust, preferring to keep its independence. In 1923, the Huots decided to stop manufacturing cylinders and concentrate on lever escapements. In May 1941, they finally incorporated the United Assortments Factories Trust, now owned by the Swatch Group, under the name Nivarox.

The village of Les Bois, near La Chaux-de-Fonds, was home to 1,450 residents in 1900, but fully 600 of these were watchmakers making up to 30,000 watches per year. The Baume family, which eventually founded Baume & Mercier, along with the Beaumann and Huot families, were the best known among these watchmaking families. Rudis Sylva founder Jackie Epitaux explains that he founded Rudis Sylva with this rich history in mind.

"It is only right to pay tribute to the work of craftsmen such as the engravers, bevellers, enamellers or guilloché artists, who give the product a noble and exclusive touch."



MAKING THE RUDIS SYLVA MODEL RS 16 WITH HARMONIOUS OSCILLATOR

Case & Buckle: Polished pink or white 18-karat gold

Width: 44mm x 14.3mm with Eric Giroud's 'glass box'

Back decoration: Hand-engraved sundial with grand feu enamel

Hands: Pink or white gold, hand decorated

Decoration: Drawing on the both faces, beveling on the flanks

Movement: Harmonious Oscillator **Dimensions:** h. 7.78 mm / 39.55 mm

Winding: Manual, about 49 crown revolutions

Power reserve: 70 hours

Main plate: Handcrafted guilloché decoration of tapering pyramids. From the edge to the

center of the piece, each guilloché line includes 60 pyramids, each one smaller

than its neighbor, requiring extremely meticulous guilloché.

Bridges: Hand-decorated, beveling, circular graining, **Gear train:** Circular graining, diamond-polished corners

Second indicator bridge: Machined from titanium and hand-beveled, this bridge includes 28 closed angles.

It takes 10 times longer to create a closed angle in titanium than a rounded

corner in steel.

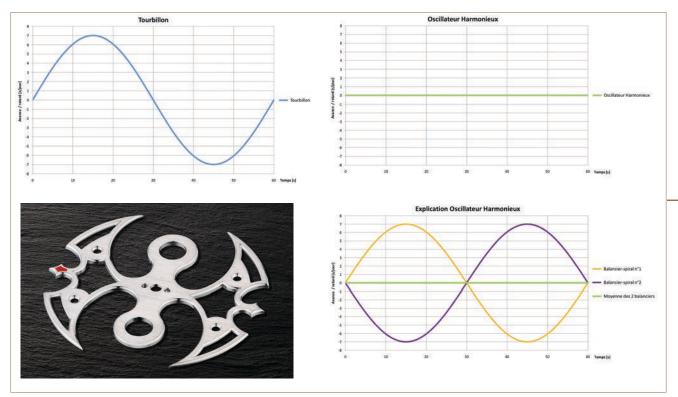
Patent: System unique worldwide, patent no. 575/09Balances: Toothed, interlinked, ensuring the same amplitude

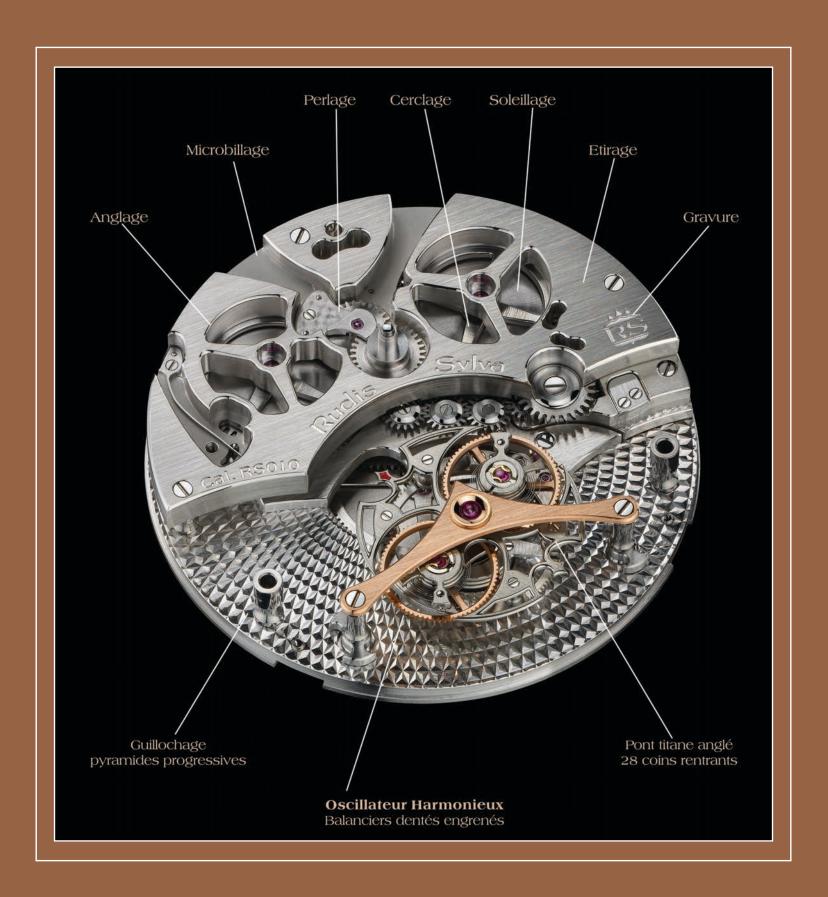
Escapement: One with one pallet fork positioned at 90° frequency at 21,600 vibrations/hour (3 Hz)

Cage: Rotation 360° in 60 seconds; cage diameter is 17.40 mm

Balance-springs: Two flat, asymmetric deployment balance-springs constantly opposed

Price: \$275,000







Back view >>

PULLIAG BY GARY GEORGE CURTAIN BACK



ptly named, DeWitt's Academia series of watches presents the mathematical and engineering nature of mechanical watches first and foremost. Putting aside DeWitt's own talents for making exquisite dials for this latest series, the Academia Skeleton does away with that canvas and platform in favor of another area of expertise – the movement.

Having made its own in-house movements for quite some time, DeWitt has developed certain components that mark a movement as its own. One of these identifiers is the set of planetary gears integrated into the mainspring barrel. While winding the watch this series of gears attract the eye as they rotate one within another. In this case a small red triangle denotes the remaining run time on a chapter arc ring above the barrel. Side by side with a sister spring barrel running in series, the movement achieves an impressive autonomy of more than 100 hours. Adding a bit of action by way of technical expertise, the Academia Skeleton also displays the sec-

onds in a rather playful way. Skeptics may poo-poo what might seem at first blush a simple retrograde seconds display, but DeWitt has a bit more panache than that. Yes, the seconds hand is a retrograde that snaps back every 30 seconds, but it also extends and retract simultaneously when it snaps back to follow one of the two arcs marking the passing seconds.

Of course this is an absolutely frivolous and thoroughly useless complication as it adds no additional information or accuracy, but real watch lovers that appreciate the mechanics, the heart and soul of a fine timepiece. Collectors will appreciate what DeWitt has accomplished with the Academia Skeleton's thrusting and retracting retrograde second hand simply for the fact that it has been achieved. One long look under a loupe makes it clear that the micro-mechanics in this mechanism are no mean feat. As described at DeWitt, the track of the seconds hand is 'not unlike the eccentric swipe of the windshield wipers of a luxury car' - in miniature of course. \spadesuit







The inside story of the new Czapek & Cie.

ver a year or so ago, on an excruciatingly hot July day and in the midst of a huge project with an insane deadline, I got a call from a friendly gentleman who asked me if I could have a look at a text about a new watch that was about to hit the market. It was all very hush-hush, he couldn't say too much about it right now and I was to keep this absolutely confidential. I was only moderately curious, since misappropriation of journalists as marketing tools tends to be widespread in all industries these days, and my time was limited. The whole confidential business sounded suspiciously like those strange embargoes that are meant to generate buzz.

What he did mention was that the new watch was to be a revival of the works of a 19th-century Polish watchmaker working in Geneva, a somewhat mysterious fellow, who fled Poland after fighting against the Russians in the November Uprising of 1830-31.

It caught my ear: "Sure," I thought, "Patek's illegitimate son..."
Funny thing: As it turns out, that cynical thought, born of my
ignorance of historic detail, was not too far from the truth. The caller

was Xavier de Roquemaurel, and the watchmaker he was referring to was one Franczisek (François) Czapek, who, for six years, from 1839 to 1845, had been a partner of Antoine Norbert de Patek. When their contract expired, Patek signed up with another expert watchmaker, a Parisian named Adrien Philippe, who had invented a system to wind pocket watches without using a key. Czapek, apparently, did not like the idea, and was happy to continue on his own.

The brochure showed up a few days later as promised and revealed some surprisingly nice material. The single Czapek watch presented bore the number 3430 and had been made around 1850. The esthetics of the watch appeared rooted less in western European rationalism of the industrial age and more in eastern European romanticism. It had a broad face with lots of brilliant white space. Two subdials cut into the grand-feu enamel at 7:30 and 4:30 displayed seconds and a seven-day power reserve respectively. The power reserve had a clever double hand that also pointed to a seven-day calendar.

"The watches used to be wound up on Sundays and then would

CZAPEK & CIE





Czapek & Cei was the watchmaker to Napoleon III, below.



run a seven day course," said de Roquemaurel when I commented on this ingenious system. The impressive power reserve was generated by two serially coupled barrel springs.

The attraction of the 3430 was the combination of symmetry from left to right and asymmetry from top to bottom. As for the Roman numerals, they might have been just a hair or two too long and narrow, creating a slight dissonance in the way a beauty mark might on a clear face, but they did harmonize with the delicate fleur-de-lys hands that swept the dial. "We haven't been able to replicate them yet, even with all our modern technology," de Roquemaurel told me. "We are not quite sure how he made them."

A MYSTERIOUS ANCESTOR

There was more that was unknown about this watchmaker, Patek's first partner... François Czapek must have been quite a character, perhaps a bit contrarian, a little rash occasionally, but definitely singleminded. He was not Polish originally, as de Roquemaurel had told me, but — as his name clearly indicates — Czech, or rather from the Kingdom of Bohemia. It was his mother, Catherine Walaschek, who was Polish. Some sources suggested he had learned watchmaking in Prague and Vienna. His first partner in Geneva was one "Moreau." He was also married to the daughter of a local watchmaker named Gevril.

After breaking up with Patek in 1845, he founded Czapek & Cie and in addition to making watches, he published the first Polish-language book on watchmaking with the title (in translation) Remarks On Watchmaking For Watchmakers And The Public. He was fortunate to befriend one Juliusz Gruzewski, a hero of the November Uprising, a representative of the Polish government in Switzerland, and a very well-connected individual. He ultimately invested in Czapek & Cie and helped get the products known in higher circles. At the apex of his career, Czapek was Purveyor of Watches to the court of Napoleon III, the emperor of France. Besides his workshop in Geneva, he kept a shop on Place Vendôme, no less, and one in Warsaw.



Arsenal in Warsaw

Despite all of his apparent fame, Czapek managed to disappear without a trace. He was last heard of in about 1869, when his business in Paris changed hands. Was he ill? Dead? Did he get caught up in the devastating siege of Paris that began a year later, or the Paris Commune after that? Or perhaps he lost his mind from the mercury vapor process used in gold-plating of movements? At any rate, the strange and sudden disappearance of this maverick watchmaker has brought a slightly mystical aura to the revival of his brand.... Did he ever die?

ARTIST AND ARTISAN

Czapek survives in a few pocketwatches, and what they reveal is that he was definitely an esthete. This is evidenced by the few watches that have survived from his repertoire, watches that occasionally show up at auctions or in museums. He liked to arrange subdials in specific ways, and he had an intuitive sense for eye-catching contrasts. For the new Czapek it was soon clear that replicating this particular style directly would not work. Straight copies tend to fall flat - think Union Horlogère from a few years back – because once the wow wears off, you are simply left with an old watch in a new case.

The first collection by the resuscitated Czapek made use of some of the more salient elements of the original, like the two subdials, with the power reserve and small second, the narrow Roman numerals, the classic look, and remade them for a modern audience as if Czapek himself had never died. The fleur-de-lys hands were replaced with openworked arrows that pointed resolutely towards





Czapek Mouvement SXH1

Above: The Fleur-de-lys hands



the numerals. It was no longer a pocket watch, but instead had become a wristwatch with pleasantly rounded forms and a comfortable height. The crown, which was not a part of the original 3430, was tucked between two raised sections of the watch barrel, making it less prominent on the side of the case. This approach seems rare or even unique for a wristwatch.

The new Czapek watch was indeed an elegant timekeeper, at least on the photos. The collection, called Quai des Bergues, from the address of the Czapek workshop back in the 1800s, had four models: one in rose gold and one in white gold. A more modern version was to be in a case made of extra-tough, anti-corrosive "XO steel" produced by Montanstahl in Ticino, Switzerland.

According to the brand, 'made for the North Sea,' though I have to wonder if the Mediterranean would do... Finally, there would be a jazzier version in titanium with a carbon dial for trendier fans made up of a coiled carbon thread. There were even some drawings of future watches, far more modern, with a tourbillon and a generally more crowded dial.

Inside was a brand new movement built by Chronode S.A., Jean-François Mojon's top-notch team, contributors to such marvels as MB&F's LM1 and LM2, the Klepcys by Cyrus, and author of the Harry Winston Opus X.

The Czapek people had made a good decision not to skimp on quality and to pick one of the top movement makers in the business. When I spoke to Mojon earlier this year, he explained that he had been given the task of adapting the old movement to today's standards of excellence.

"We changed the position of the barrel springs, the shape of the bridges," Mojon pointed out. "We spent many hours with the designers and sometimes had ten different versions. The watch is inspired by a historical timepiece, but it is entirely contemporary." Looking at the movement, you can see the open ratchets, a throwback to the past, and a harmonious interplay between the balance cock and the bridge holding what looks like the fourth wheel.

Nevertheless: I did want to see one of these watches in the flesh and on the flesh. None were available at the time.

THE RE-FOUNDING FATHERS

A few months later, I met de Roquemaurel over coffee. He is a jovial man in his forties who still seemed to be finding his place in a small company after having worked as a marketing professional for such big names as L'Oréal, Ermenegildo Zegna and Ebel. He did not have a sample to show, but instead was wearing a limited edition chronograph the "company" had made to raise initial funds.

The wellspring of the new Czapek company, still in a cocoon of secrecy, was a gentleman named Harry Guhl, a freewheeling entrepreneur and leading consultant in contemporary art and, in his words, "an occasional collector of vintage watches, when I happen to come across one." In 2001, he saw a Czapek watch in a book and was immediately taken with it, but did nothing more about it. In 2008, it happened again.







CZAPEK & CIE WAS FOUNDED ON MAY 1ST, 1845 IN GENEVA, AND REBORN ON OCTOBER 21ST, 2011.

BETWEEN END 2011 AND END 2014 THE COMPANY HAS RUN THE FOLLOWING ACTIVITIES:

- COMPLETE LEGAL SEARCH ON CZAPEK
- WORLDWIDE TRADEMARK REGISTRATION: CZAPEK, FRANCOIS CZAPEK
- CREATION OF THE FIRST MODEL: DESIGN STUDY CHRONOGRAPH
- FORMULATION OF A REVIVAL PLAN THROUGH CROWD FUNDING EQUITY
- DESIGN AND CONCEPTION OF THE FIRST COLLECTION AND MOVEMENT.

It was a twist of fate, perhaps, since Guhl was now living in Prague. In 2012, he decided to buy the name, which, he was amazed to find, was up for grabs. One wonders why Patek Philippe hasn't bought it to prophylactically block anyone from piggybacking its own fame so easily, or just for old times' sake. Guhl had a partner to develop the brand, but he died, alas, leaving two options: either sell the name, or find new associates. Enter Xavier de Roquemaurel in 2013, who happened to be out of work at the time and was enthusiastic about the project.

The two men got along together, being quite different in character. De Roquemaurel is the extrovert, Guhl the introvert, a calm man, who has practiced Zen meditation for over a quarter century. What they both realized, is that they had very little actual watchmaking experience and would need a third person to make up for their absence of technical know-how. It was De Roquemaurel who suggested a someone he knew, a figure that would remain anonymous until the unveiling of the watch, scheduled for November 10, 2015...

I was curious about the origins of the project, and the financing, which, I knew already, would be done via subscription, a system that was as old as Louis-Abraham Breguet. The original idea was to get some money up front from a customer or customers, manufacture the piece, and then get the rest on delivery.

In the early twenty-first century, the Internet had adapted and

de-gentrified the idea by developing crowdfunding. "Every buyer will be an owner of the company and will have a say," Xavier de Roquemaurel told me. I must have had a skeptical look on my face, because he added that everything would be made public, notably on November 10, 2015, the date scheduled for new Czapek's coming out party. Meanwhile he had to get back to his peripatetic life raising 500,000 Swiss francs to get the first prototypes done.

THE UNVEILING

And that fateful day came soon enough, a sunny day in Geneva, with a northeasterly wind, the famous bise, chilling the atmosphere and chasing away the clouds. A small group of journalists, collectors, and other watch groupies gathered at La Potinière, a restaurant in the Jardin Anglais close to Geneva's hallmark, the Flower Clock. The pending GPHG had obviously hobbled some of the media excitement, but De Roquemaurel emceed the event with might and with main and a good dose of humor. He showed a film and then passed around a selection of watches, including some prototypes. He also divulged who the mystery watchmaker was: Sébastien Follonier, a complications specialist at Corum, who had cut his teeth with such eminent brands as Greubel Forsey and Girard-Perregaux.

De Roquemaurel had more to share, though: The financing for the project, he explained, would be done via Raizers, a European crowd equity site. They had a few months to raise 1 million Swiss





Czapek Quai des Berges No. 33 won the Public Prize at the 2016 Grand Prix d'Horlogerie de Genève.

francs. So essentially, we could all look at the watches that were there, some with painted movements, and track their success on the Raizers website.

ONWARD AND UPWARD

The three "guardians," as they occasionally call themselves, had obviously pressed the right buttons: A few months after the confab at the Potinière, Czapek & Cie had raked in pledges of nearly 1.1 million Swiss francs from ninety-three investors. The money has permitted them to implement the first collection according to plan.

Good ideas, a good yarn and excellent suppliers, and a bit of luck have contributed to making Czapek & Cie known among aficionados. In addition to having Chronode S. A. on board, they sought out LAB to make their cases, for instance, and Antoine Tschumi of Neo-Dysis for the design. De Roquemaurel also mentioned during a recent call that the suppliers have been given enormous freedom to come up with their own ideas. Then there is the element of luck: The project coincided with the craze for vintage watches that has been trending ever since the end of the 2009 recession.

Earlier this year a lot of behind-the-scenes work tweaking was being done. The issue of personalization loomed large for a while. Then, an investor-fan suggested engraving a private sentence on the dial of the Quai des Bergues models with grand-feu dials. They figured out a way to do it with the supplier, Donzé Cadrans S.A. and made this a part of their customizing service. The sentence, and the almost invisible Czapek signature, can only be seen when light hits the dial at a certain angle. It is also a guarantee against counterfeiting. The company also managed to find a way to make replicas of the original hands for the Quai des Bergues 33bis.

It is this watch that recently won the Public Prize at the 2016 Grand Prix d'Horlogerie de Genève, a victory that has boosted the spirits of the Czapek team. This victory has placed the name Czapek back on the watchmaking circuit, so to speak, after around 170 years. For Xavier de Roquemaurel, Harry Guhl and Sébastien Follonier, and their merry investors, of course, the game is now on and it's serious. ◆





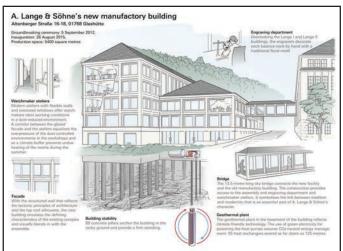




ENERGY Efficient BY MICHAEL THOMPSON



A visit to A. Lange & Söhne's new manufactory building in Glashütte.



A. Lange & Sohne's manufacturing facility features temperature controls using geothermal energy.

At left are a few of the building's 55 heat exchangers.

Watchmakers inside the new facility enjoy an consistent temperature year-round, in part due to the building's insulating second glass wall (below).





Lange & Sohne added a new, second, production facility in Glashütte last year not to ramp up production, but to make its in-house watchmaking procedures more efficient than they had been previously. And in addition to streamlining many of the company's component-making, engraving and finishing departments within the new 58,000-square-feet facility, A. Lange & Söhne also made sure the new building was itself as efficient as the watchmaking processes within it.

Launched with an official inauguration by German Chancellor Angela Merkel, the new building blends nicely into Glashutte's watch-company streetscape. It sits astride the firm's existing manufacturing facility, which is connected via a raised crosswalk.

While the new facility echoes the exterior design of the older production facility across the street (but with much larger window openings and more internal space), the new building's interior is designed to be far more energy efficient. This is accomplished with Saxony's largest geothermal energy plant, built with fifty-five heat

exchangers that reach 410 feet below ground level (see accompanying chart) to maintain a consistent indoor climate year-round. Since these pumps operate via renewable energy sources, the new Lange manufactory is CO2-free. As part of the eco-friendly design, a glass hallway runs along the building's exterior walls to further spare the watchmakers within from temperature variations caused by the exterior temperature.

With the addition of this new facility, the firm's fourth (and largest) building in Glashütte, the firm's approximately 250 watchmakers attend to their timepieces within with a more efficiently planned workspace. Newer heavy CNC machinery, a sometimes-difficult fit in the older production building, has been installed in the new facility's custom-made lower floors. Case polishing, movement making and many finishing steps are made in adjacent, sun-lit rooms, minimizing the time they travel between workshops. Finishing also occurs in the adjacent building.

"The new building is a response to employment growth in recent years and represents an investment in the manufactory's Watchmaking at A. Lange & Söhne.

future," said Lange CEO Wilhelm Schmid during the new building's 2015 inaugural. "The focus," he added, "was on a modern, energy-efficient building that would offer appealing surroundings and ideal working conditions. This will help us further enhance the quality of our watches and optimize our production processes. All the while, we strive to minimize our ecological footprint and resource consumption.

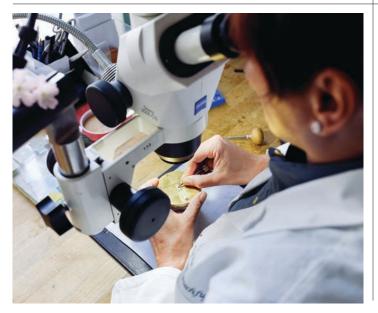
WORKSHOPS

These modern workshops allow the firm's watchmakers to enjoy dust-free, climate-controlled workspaces. The new building's impressive central stairway curves like a multi-story hairspring leading from the upper watchmaker's floors to the heavy parts manufacturing rooms set at ground level and below. CNC machines hum as they initiate the case making and component-production processes while two floors above engravers, polishers, in-house-trained finishers and assemblers create the firm's timepieces.

Each watch here is, famously, assembled twice and checked for quality each time. Watchmakers work in departments separated by sub-assembly or operation (engineering, design, prototype production and testing, parts production, finishing and engraving). One department, significantly, assembles the escapement and the balance. This not only involves the setting of the lever and the adjustment of the entry and exit pallets, but also includes measuring the hairspring's active length and then bending the terminal curve as required. All hairsprings are manufactured in-house.

When the first assembly is complete, the watchmaker checks the gears, pinions and moving components to be sure all are operat-







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LANGE FINISHING TECHNIQUES











4 CIRCULAR GRAINING

Smaller whiteis are financed with creative graining. The regular circular continues are produced when the part is



Top Left: Caliber L043.1 (Zeitwerk).

Left: The three-part regulator dial of the Richard Lange Tourbillon "Pour le Mérite" was inspired by a precision chronometer crafted by Dresden master watchmaker Johann Heinrich Seyffert.

ing within the firm's high tolerances. Then each watch is again taken apart and re-cleaned to assure the watch's eventual owner that no scratches or dust particles worked their way into the movement or case during the initial assembly. In this second, final assembly phase, one single watchmaker is responsible for the entire movement.

Once cleaned, the components are ready to be engraved and polished. The three-quarter plate made of German silver is embellished with traditional ribbing while each caliber's gold chatons are manually polished and inserted in the plate. The temporary jig screws are replaced with the final heat-blued screws.

As demonstrated during a recent visit to Glashutte, watchmakers at A. Lange & Söhne decorate each component with its own specific type of finissage regardless of whether or not it is visible



Above: Finishing techniques used by A. Lange & Söhne.

Left: Black polishing on a tin plate.

through the sapphire-crystal caseback. Likewise, all A. Lange & Söhne's balance cocks are engraved with the Lange-style floral pattern that differs slightly, according to the individual engraver. All plate edges, bridges and levers are chamfered (which involves beveling and polishing). Each bevel is then polished by hand while certain movement parts are pre-polished with smooth rubber tools and then finished with a polishing brush. Harder steel parts are polished with a rotating wooden wheel.

It's clear that all the company's watches receive this sort of individualized attention. With its new, highly efficient facility, A. Lange & Söhne has opened up an environment where its employees can more effectively abide by the words of its founder F.A. Lange, who said: "The entire pursuit of a watchmaker should be the perfection of each and every watch." ◆



THE RICHARD LANGE 'POUR LE MÉRITE'



This recently debuted limited edition adds a white gold model with a sumptuous black dial to a collection first seen in 2009. Previously only available in platinum or red gold, this watch features a simple dial that displays only hours, minutes, and seconds. Turn the watch over, however, and the wearer sees a highly decorated movement that incorporates a fusée-and-chain system to improve chronometry. Inspired by historic pocket watches and integrated into a wristwatch by A. Lange & Söhne in 1994 for the first time, the mechanism assures that a constant torque stabilizes the amplitude of the balance as long as the watch is running. All A. Lange & Söhne Pour le Mérite' editions utilize this device.

Wrapped around the mainspring barrel, the chain delivers the power of the mainspring to the wheel train via the cone-shaped fusée. This keeps the torque constant. In principle, the mecha-

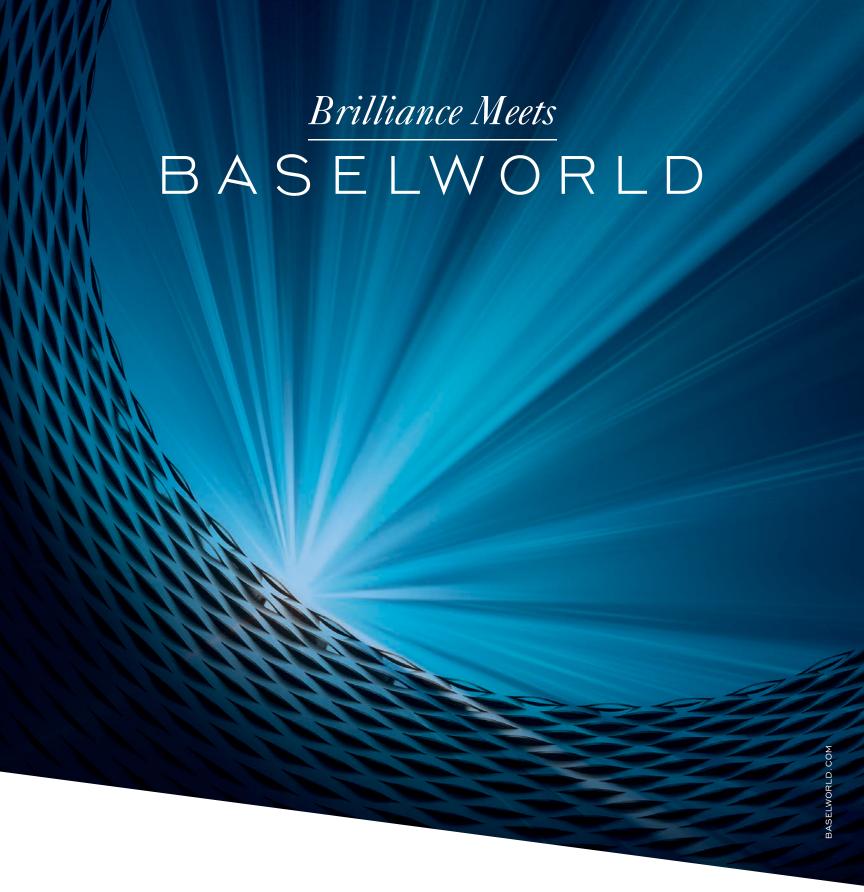
nism works like the gearing of a bicycle except that the gear ratios are infinitely variable rather than fixed.

The 636-part chain is deceptively strong. It seems thin, even hair-like, but it can actually support a weight of more than 4.4 pounds. The fusée-and-chain transmission causes the fusée to rotate in one direction during the winding process and in the opposite direction when the watch is running. A. Lange & Söhne watchmakers have thus devised an elaborate planetary gear system inside the fusée to maintain the flow of power from the fusée to the movement while winding occurs.

Even the watch's black dial is a complicated construction, explains A. Lange & Sohne's director of product development Anthony De Haas.

"The first editions in platinum and pink gold we made with enamel dials, which are very hard to produce," he says. "Those





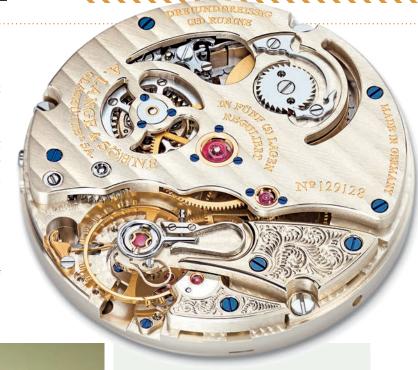
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THE RICHARD LANGE 'POUR LE MÉRITE'

took a long time—in fact we took almost as long making the dial as the movements, because we know the movement well. What makes it difficult is that it's a three-piece enamel dial."

Instead, De Haas says he opted here for a somewhat less labor-intensive silver dial with a rich black finish and contrasting white numerals. The dial choice likely affects the retail price for this piece, which at \$82,500 compares favorably to the \$113,500 pink gold version. The Richard Lange 'Pour le Mérite' white-gold 40.5mm case encircles white Roman numerals and rhodium gold hands. This edition's black dial has a new touch of color too. Note the small Arabic numerals in red at each quarter hour indication. This latest Richard Lange Pour le Mérite is a limited edition of 218 pieces—one for each A. Lange & Söhne retailer worldwide, excluding its own boutiques.







A HONEY GOLD Lange 1 time zone

Released in October, this latest edition of a long-time A. Lange & Söhne favorite tweaks the model's features just a bit. Now the dial is somewhat more subdued as the letters 'GMT' and the markers separating the city names are blue, not red. In addition, the subdial ring for the second timezone is also blue, rather than black. Finally, the city ring indication that represents Central European Time now says Dresden, replacing Berlin. Dresden is the city where the company presented its first collections twenty-two years ago on October 24, 1994.

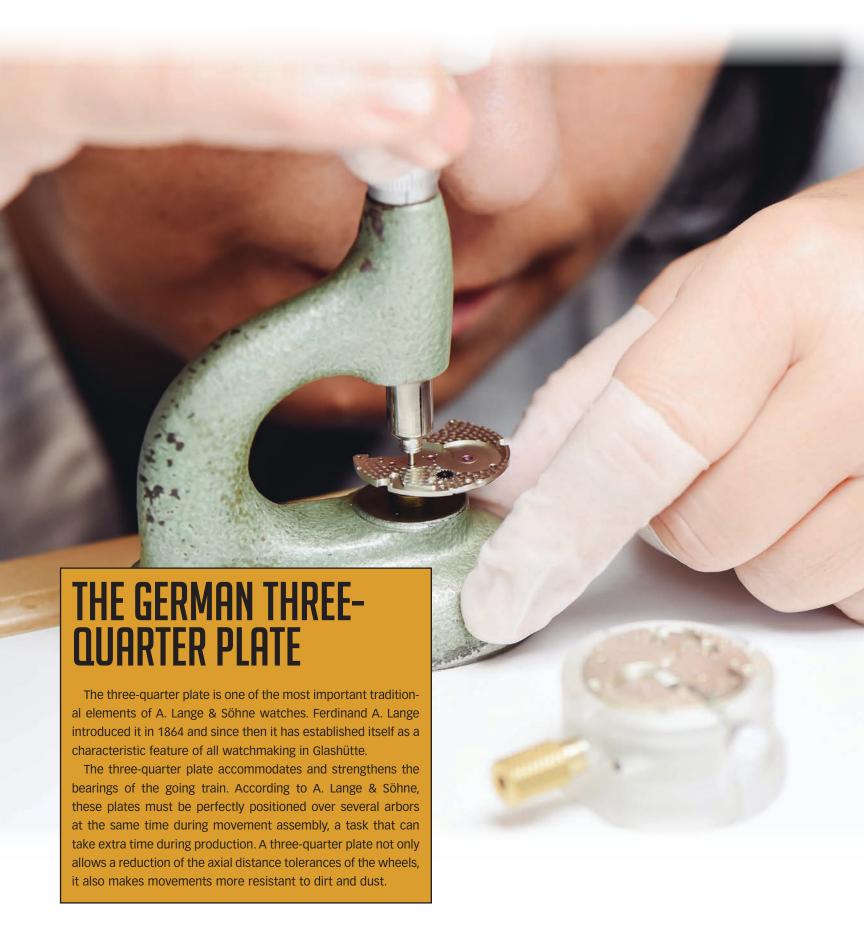
Since it debuted in 2005, the Lange 1 TimeZone has become one of A. Lange & Söhne's best-known models. Not only is it beautifully designed, it offers a particularly interesting adjustment option that allows the user to change the home time display on the main dial with the time indicated on the secondary dial. The time zone is set with a lateral pusher. It advances the rotating city ring with the twenty-four place names from west to east.

Over the years A. Lange & Söhne has offered this watch cased in yellow gold, rose gold, platinum and white gold, but this newest edition has the watch bathed in A. Lange & Söhne's proprietary hue called honey gold. Honey gold is a mix of pink gold and yellow gold and offers a warmer tone while also retaining an extra-hard Vickers level. Inside is hand-finished manufacture caliber L031.1 with a power reserve of three days. Limited to 100 watches, this Dresden Honey Gold edition of the Lange 1 Time Zone is available in all A. Lange & Söhne boutiques. Price: \$64,300.









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The Ressence patented ROCS module is driven by the minute axle of a customized ETA self-winding 2824/2 base caliber. This unique 142-part horological complication is entirely bathed in 37.5ml of oil. ROCS five functions are: Runner, Minutes, Hours and Oil Temperature. (This exploded view does not include the base caliber).

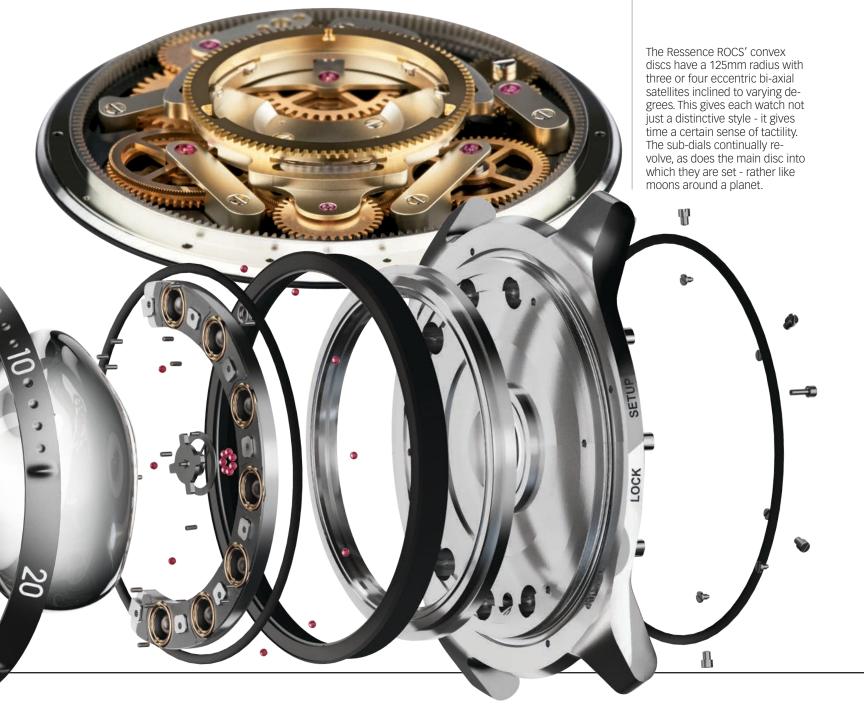


elgian industrial designer Benoît Mintiens created quite a stir when he debuted the first Ressence watches seven years ago. With a crowd around him at the now-defunct GMT show in Geneva that year, and later at the Basel fair, Mintiens presented watches featuring dials that separated timekeeping and function indicator subdials like many regulator clocks and watches, but with an even more unusual feature: each timekeeping hand was on a single plane and rotated around the entire dial to follow the minute hand. Like a classic regulator dial, the minute hand is larger than the other timekeeping indicators on a Ressence dial. It leads a one-hour rotation around the dial; the hours, running seconds and other indicators also slowly change their position.

And if these first designs weren't unusual enough, Mintiens then several years later debuted his Type 3 with—gasp—an oil-filled case that eliminates reflections and makes the dial perfectly readable at any angle.

Mintiens explains that because oil and glass share very similar responses to refraction, the eye is tricked into momentarily losing its depth perception, thus the dial's indications all appear on one level.

But the 2.4 tablespoons of oil Mintiens pours into his Type 3 and Type 5 watches represents just one of many one-of-a-kind inventions that make Ressence such an odd duck of watchmaking. Let's look at a few other components found inside these two most recent Ressence watches.



ROCS

Beneath the oil-filled top half of the Type 3 and Type 5 cases lies yet another ingenious Mintiens invention called Ressence Orbital Convex System, or ROCS, the three-dimensional revolving bridge system that translates the power from the minute-hand axle of the customized self-winding ETA 2824/2 caliber below directly to the dial.

The ROCS system, transmitted via a set of shielded magnets, creates the planetary movement visible on the dial, whereby each timing hand and day-of-the-week indicator rotates independently while the larger main disc (with the minute hand) rotates once per hour.

Several micro magnets, connected to each other, are positioned inside the upper half and the lower half and are separated by a grade 5 titanium membrane. These magnets, despite being separated, transmit the minute information from the base caliber to the ROCS.

Mintiens developed ROCS first for Ressence Type 1, which offers the same rotating, single-plane dial system, but without the oil refraction display he subsequently added to the newer designs. The movement is protected from the effects of any magnetism by a soft-iron Faraday cage.

OIL & BELLOWS

As in the Type 3 and the Type 5, the ROCS is physically separated from the rest of the watch because it is suspended in oil. Remember that oil volume fluctuates as the temperature



or expand if the temperature drops to reduce the oil volume. This system is directly connected to the fun and functional oil temperature gauge on the dial.

Mintiens says he created this complicated gearing system so he could offer what he calls a more intuitive reading of the time. He says he wants his timepieces to be "extensions of nature, all curves with only rounded shapes." Indeed, the company name comes from a contraction of the phrase "renaissance of the essential," which Mintiens champions as a starting point to talk about how time is displayed.

RESSENCE TYPE 5

LATEST MODELS

Ressence last year added an all-black case to its Type 5, renaming the new model Ressence Type 5BB (\$35,800). Mintiens built the Type 5 to highlight the strong visibility of his unique oil-filled system, but he also notes that the watch's case design, gently domed sapphire crystal and convex dial are together meant to evoke a more naturalistic rounded shape that mimics the hydrodynamic profile of a sea turtle.



As a dive watch, the Ressence Type 5 ensures its 100-meter water-resistance with a new case-back made with a system called the Ressence Compression Lock System, or RCLS, which essentially locks and compresses the case gasket with two positions, 'lock' and 'set.' Like true dive watches, the Type 5 is designed to meet the ISO 6425 dive watch standards, including a seamlessly integrated unidirectional bezel. Because it's made of titanium, the 46mm by 15.5mm watch remains lightweight, weighing eighty-seven grams, only eight grams more than the dressier Type 3.

As noted above, the titanium Type 5 and the DLC-blackened titanium Type 5BB are both powered by an ETA 2824/2 based movement configured with Ressence's own ROCS system with

magnetic-transmission planetary movement module. The automatic movement features a power reserve of approximately 36 hours, and its functions include an oil temperature gauge, hours, minutes and an unusual 90-second 'runner' subdial, which serves to indicate the automatic watch is operating.

RESSENCE TYPE 3

Ressence's Type 3, also made with titanium case, owns the distinction of winning the Horological Revelation Prize at the 2013 GPHG Awards. The watch is a bit smaller than Type 5, measuring 44mm in diameter, and features additional dial indications with day, date and AM/PM indicators in addition to the hours, minutes and 360-second runner dial.





An ingenious hydraulic shock absorber is designed to prevent the uncoupling of the magnetic transmission of the TYPE 5. The shock absorption system is based on a bottlenecked oil flow. Blades under the runner disc generate a flow of oil that is guided through small apertures. When the watch undergoes a shock, the oil flow increases and will exceed the capacity of these apertures. This will induce a hydraulic friction that will slow down the rotation speed of the runner disc. The runner disc is mechanically connected to the rest of the watch via a set of gears. The system will keep the ROCS and the rest of the watch connected together and will prevent the uncoupling of the magnets. (captions courtesy Ressence)

Magnetic Transmission



Ressence Type 5bb, the all-black dive model, also at far right...





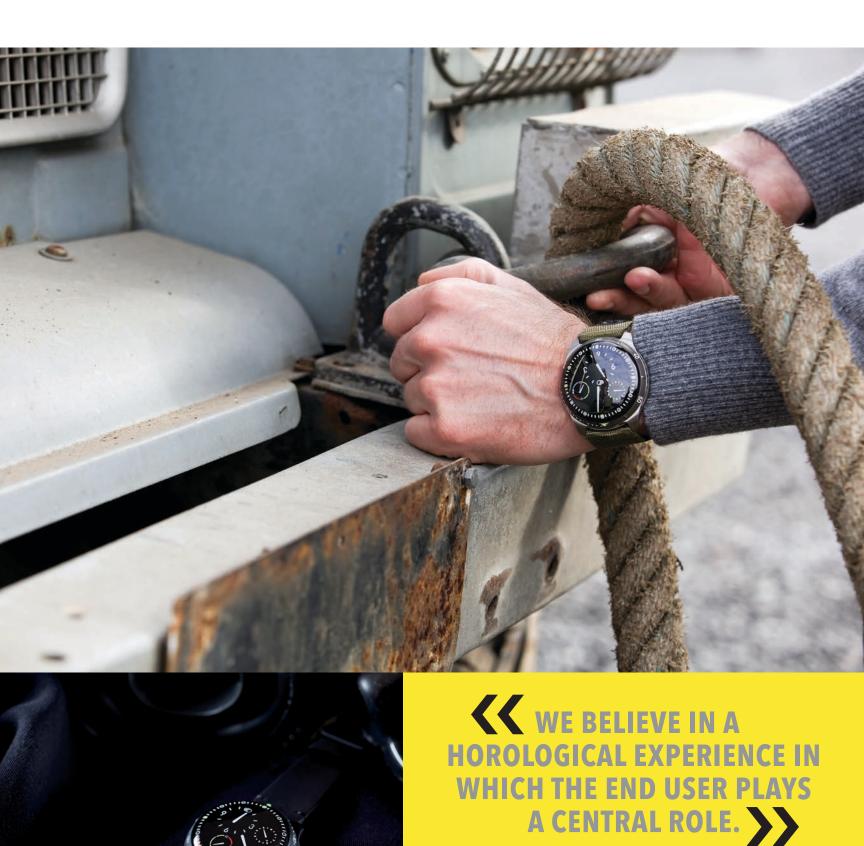
The organic design of the TYPE 5 takes its inspiration from nature. Evolution has given sea turtles a distinct aqua-dynamic shape to propel themselves easily through water so what better shape for an amphibious watch? Strapped onto your thermal suit, the TYPE 5 will conform to your wrist to guarantee optimum hydrodynamic properties.



NO CROWN

RESSENCE

TYPE5



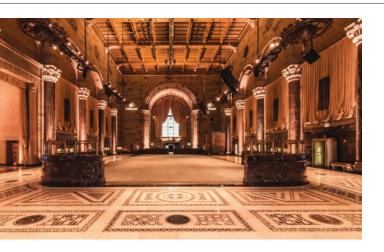
To learn more about the technology behind Ressence or to experience how a Ressence dial shows the time, using an online 'Interactive Time Simulator,' visit ressencewatches.com. ◆





PATEK PHILIPPE

to Present a Grand Exhibition in New York



A ten-day exhibition, free to the public, will showcase Patek Philippe's finest and will offer insight into the company's 178-year history.

mericans will gain a thorough insight into the history of fine watchmaking as Patek Philippe opens up its vaults this July 13 through July 23 to present "The Art of Watches, Grand Exhibition New York 2017" at Cipriani on 42nd Street. The vast space, just across the street from Grand Central Terminal, is a glittering former bank building that Patek Philippe will transform into a two-story structure with ten themed exhibition rooms curated to showcase the Geneva company's history and to present fine watchmaking to the general public.

Within those ten rooms, which will include (among others)

a Theater Room, a Current Collection Room, a Museum Room, a U.S. Historic Room, a Rare Handcrafts Gallery and a Grand Complications Room, visitors will have access to pocket and wristwatches dating back to 1530 in a space measuring a whopping 13,218 square feet. In addition to the historic exhibit, Patek Philippe will present interactive watchmaker and artisan demonstrations to help educate visitors about fine watchmaking. Visitors will also be able rest and relax in the Patek Philippe Café.

"By offering visitors an immersion inside the world of Patek Philippe, we really want to share our passion for watchmaking and hope visitors will come out of the Exhibition with a greater

The Napoleon Room

Visitors will be transported to the magical Patek Philippe Salon on the Rue du Rhone, Geneva, and will be captivated by the incredible live view over Lake Geneva. The Napoleon Room will showcase limited-edition



knowledge and appreciation of the art of watches," says Jasmina Steele, the international communication & public relations director of Patek Philippe. "New York was a logical choice for the U.S. Grand Exhibition, as this was one of the first landing spots for Patek and Philippe in the 1800s when they began to explore the new world," adds Larry Pettinelli, president of Patek Philippe U.S.

The exhibit is not far from Rockefeller Center, where Henri Stern, grandfather of current company president Thierry Stern, launched the Henry Stern Watch Agency in 1946 a century after the Geneva-based company first began selling its pocket watches in the United States.

"I am very proud that American visitors will be able to learn more about the historic and contemporary ties between our company and the American market," Stern says.

On the following pages we present a preview to the exhibit, where several Patek Philippe pieces will be displayed for the first time outside their homes in museums or private collections. Highlights include the James Ward Packer complicated pocket watch made in 1925-1927, a Patek Philippe Ref. 6002 Sky Moon Tourbillon from 2013, a Caliber 89 from 1989 and an 1851 pocket watch with an enameled portrait of George Washington.







istorical Timepieces



Left: Pocket Watch

Presented at the 1851 Universal Exhibition in London. The back is engraved with scrolling patterns on a black enamel ground; it is adorned with an enamelled portrait of George Washington, with a flux finishing.

Right: New Ref. 6300G **Grandmaster Chime**

features five chiming functions among its twenty complications.



Above: James Ward Packard's Astronomical Pocket Watch

The back of the case opens to reveal a rotating celestial map.



The Art of Watches, Grand Exhibition will be open to the general public and free of charge July 13th -23rd, 2017, from 10:00am to 7:00pm Monday through Sunday, and with special extended evening hours on Thursday, July 20th from 10:00am to 9:00pm. Guided tours will be available on a daily basis. School tours and a Family Day will be planned as part of the educational objective.





Historical Dave Handerafts







DEWITT CLASSIC JAPANESE SPRING

This DeWitt limited edition (ten pieces) from its Métiers d'Art collection features a 40mm rose gold case set with 60 brilliant-cut diamonds and powered by a mechanical self-winding movement. They are made in partnership with a Japanese artist who uses a special technique inspired by ancient Japanese calligraphy. The artist mixes an extremely fine powder of gemstones and precious stones with ink and starts to 'dot' the dial. The artisan is required to create around 50,000 individual dots to complete a dial. The dial's flower design is made with powdered diamond, pearl, platinum, gold, tiger's eye, malachite, quartz and other gemstones. The motif recalls flowers from a Japanese garden. Price: \$49,500.











WEMPE GOLD TWIST

In 2014, Wempe combined its watchmaking ambition with its jewelry expertise to create the Helioro By Kim, a watch is based on the Helioro ring. It consists of nine strands of gold that twist around one another without a visible physical core. The gold case has a diameter of 37mm, and the mother-of-pearl dial has hour markers that are either calligraphic or formed of brilliant-cut diamonds. Arching above the dial is a sapphire crystal that has been ground to a round shape on both sides. The lines of the watchcase are continued in the clasp of the alligator-skin wristband. The watch is available in rose gold or white gold, with two variants for each color. One has 246 brilliant-cut diamonds in a pavé setting with a total of 1.80 carats; the other is decorated with a line of 57 brilliant-cut diamonds with a total of 0.43 carats. The watch is driven by a Swiss-made quartz movement. Prices: \$25,650 (white gold) and \$41,100 (rose gold).







ROGER DUBUIS

DIRECT FROM SIHH 2017: EXCALIBUR 36

Direct from SIHH 2017 in Geneva, Roger Dubuis presents this smaller-sized interpretation of the Excalibur design that echoes the collection's trademark fluted bezel and triple lugs, together with the radiating Roman numerals. The black DLC-treated titanium case is topped by a bezel set with 48 blue sapphires. These gems are nicely set to reflect blue PVD-coated dial with its shimmering sun-brushed finish. The glitter is offset only with a small seconds subdial and a small date display. Not strictly a watch for ladies, the new model is just the first of several new and colorful gem-set 36mm diameter watches Roger Dubuis will add in January to this increasingly popular collection. The watch is equipped with the RD830 caliber featuring a 22-karat pink gold rotor that may be admired through the transparent sapphire crystal case-back and ensures a 48-hour power reserve. As a finishing touch, the matching blue alligator leather strap is fitted with DLC-treated titanium folding buckle. Only twenty-eight will be made. Prices to come.



BULGARI PRECIOUS COILS

Bulgari unveils this Serpenti Incantati line that blends





CHRISTOPHE CLARET FLUTTERING BY

Christophe Claret's Marguerite offers two graceful butterflies that flit around a daisy on this 42.5mm watch whose white lacquered petals overlap like a real flower. Christophe Claret invites two butterflies in blue, orange or red Super-LumiNova, depending on the version, to tell time. The darker one, symbolizing the female, is perched on a daisy petal that rotates every hour. Meanwhile, the lighter one, embodying the male, indicates the minutes. Sitting lightly atop a stem attached to the precious pistil made of rubies or blue sapphires, it literally flutters around the white mother-of-pearl dial. One press on the pusher at 2 o'clock makes the numbers disappear to reveal the phrase: "Il m'aime passionnément" (He loves me passionately). Price: \$72,700.



CARL F. BUCHERER

PRECIOUS SWAN

With the Carl F. Bucherer Pathos Swan, this traditional Lucerne-based brand showcases its expertise in producing jewelry watches. Precisely 922 diamonds and sapphires adorn the case, dial and strap of this ladies' watch. Top Wesselton quality diamonds and sapphires in various blue tones combine to suggest the image of a swan gliding gracefully over water. The many facets of the curved case are expressed by the gemstone border that follows the shape of the timepiece. The Pathos Swan is a highly exclusive watch available in two variants. In one of the variants, the slender watchstrap and the folding clasp are made entirely from 18-karat rose gold. The second variant offers a combination of white and rose gold. Both variants are produced in a limited edition of 88 pieces. Prices: \$171,600 (rose gold) and \$182,000 (white gold/rose gold two-tone).





Ready for

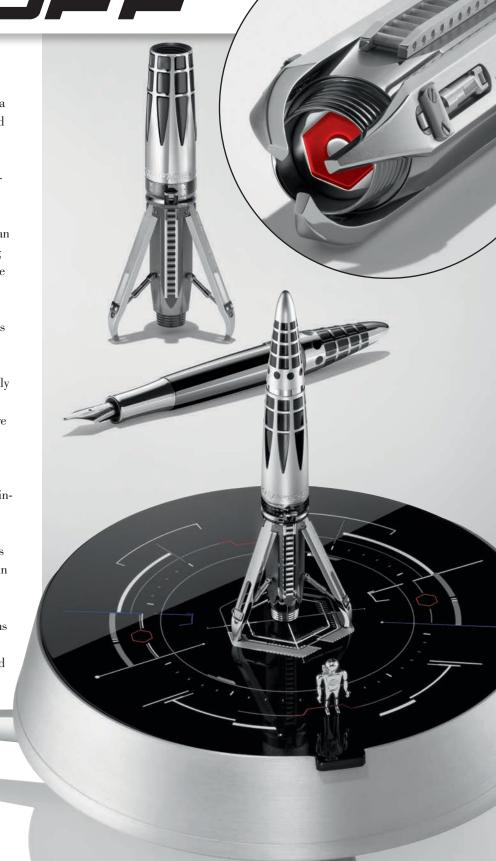
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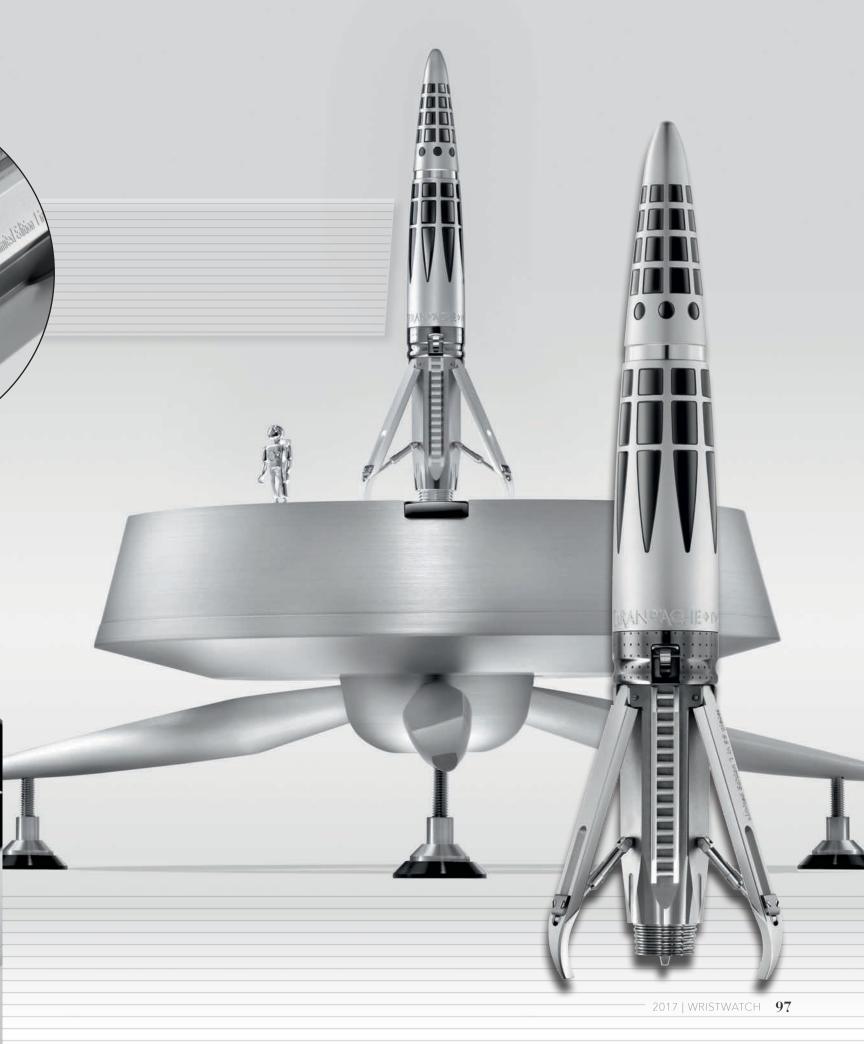
wo Swiss brands—one known for its dazzling array of fine writing instruments and the other a conceptual horological laboratory—have joined forces to create an incredible amalgamation of their respective fortes. The resultant Astrograph, by Caran d'Ache and MB&F, is a limited-edition pen that is part writing instrument and part poetry.

The Astrograph saga began about four years ago, when MB&F founder Maximilian Büsser shared an idea with Caran d'Ache: he wished to allow his childhood dream of traveling in space to take shape in a writing instrument. Caran d'Ache was up to the task, creating a pen inspired by a rocket, set inside a launch pad-style box. With the 99 components and 500 manual operations required, construction of the pen was no easy feat, but it was—at its heart—an adventure.

Since the Astrograph is first and foremost a writing instrument, the pen's proportions ensure that it rests perfectly and comfortably in the hand. Its structure is articulated by an ingenious mechanism inspired by penknives. A miniature lever, the "entry door" to the rocket, activates the lowering of three stabilizer legs that allow the pen to stand vertically. These, like the miniature ladder than runs alongside the "thruster engines," comprise parts that are sandblasted, satinfinished and rhodium-plated.

The dual-branded Astrograph is available in three styles, each complemented by anthracite lacquer: high-gloss rhodium (fountain pen), sandblasted matte rhodium (fountain pen or rollerball) or ruthenium anthracite (fountain pen). Each variation is engraved on one of the stabilizer legs with its number within the edition of 99 pieces. The fountain pens feature an 18-karat gold nib. The Astrograph comes with a miniature figurine of an astronaut that is rhodium plated and magnetized so it will attach to any part of the pen's body, ready for takeoff. ◆







PREPARE YOUR WATCH

Borrowing engineering principles from NASA training machines, the new Doettling gyroscopic watch winder will perform a circular ballet with three concentric rings hypnotizing the onlooker while it takes good care to wind your automatic mechanical watches. Other versions of this type of winder have been proposed, but Doettling takes the function and construction to a higher plane. Supplied with counterweights and superbly finished, the custom controls allow you to customize the settings and setup that will make it the perfect home for one of your most prized watches when not on your wrist. Sprung brackets and gimbaled hoops perform their act under glass allowing for a full view of the seemingly unending sequence of patterns formed by the multiple rings. Now represented by Esper Luxury







group in North America, you can reserve your spot in the limited production run (there is a four-month delivery time as these are made to order) and learn more about this winder (about \$12,000) at www.esperluxe.com.





THE DATEJUST 41

The new generation of the essential classic, with a new movement and design that keep it at the forefront of watchmaking.

It doesn't just tell time. It tells history.





OYSTER PERPETUAL DATEJUST 41